



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

May 18, 2009

Allan E. Creamer  
Federal Energy Regulatory Commission  
Office of Energy Projects  
888 First Street, NE  
Washington, DC 20426

RE: Draft Environmental Impact Statement (DEIS) Relicensing the Smith Mountain Pumped Storage Project No. 2210-169 Bedford, Campbell, Franklin, and Pittsylvania Counties Virginia (CEQ #20090091)

Dear Mr. Creamer:

In accordance with the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) offers the following comments regarding the subject document.

The project is an existing, two-dam two-reservoir combination pumped storage and conventional hydroelectric project. The 586-MW Smith Mountain pumped storage development consists of a 235-foot-high, 816-foot-long concrete arch dam, a 20,260-acre reservoir (Smith Mountain Lake), and a powerhouse with five generating units. The 50-MW conventional Leesville development consists of a 94-foot-high, 980-foot-long concrete gravity dam, a 3,260-acre reservoir (Leesville Lake), and a powerhouse containing two turbine-generating units. The Project operates as a peaking facility, with generation occurring during peak usage periods. During off-peak periods, water passed through the Smith Mountain development to Leesville Lake is pumped back into Smith Mountain Lake to be used again for generation. The Leesville Development is operated in an auto-cycling mode to provide an average weekly flow of 650 cubic feet per second downstream in the Roanoke River.

Appalachian Power does not propose any new development, nor to modify project operation, except to discharge flows downstream of Leesville, in accordance with its proposed Water Management Plan. Appalachian Power also proposes to implement a variety of resource management plans, including those related to: (1) sedimentation and erosion, (2) water quality, (3) the federally endangered Roanoke logperch, (4) littoral zone aquatic habitat in both lakes, (5) nuisance/invasive aquatic vegetation, (6) recreation and shoreline management, (7) navigation aids, (8) floating debris and (9) cultural resources.

In addition to Appalachian Power's proposed action, the DEIS considers three alternatives: (1) proposed action with mandatory conditions (e.g. water quality certification conditions), (2) proposed action with mandatory conditions and additional staff-recommended measures (Staff Alternative) and (3) no-action. The Staff Alternative is the preferred alternative because: (1) the project would continue to provide a dependable source of electrical energy, (2) the 636 MW of electric energy generation from a renewable resource may offset the use of fossil-fueled, steam-electric generating plants, thereby conserving nonrenewable resources and reducing atmospheric pollution and (3) the recommended environmental measures would adequately protect and enhance environmental resources affected by the project.

The information provided in the DEIS indicates that as a result of current activities in the area and from the existing dams there are currently sediment and water quality issues. Since the impacts of the proposed action are unclear, there is a monitoring and adaptive management aspect to this proposal. Detailed comments on the document are presented in the enclosed attachment.

Based on our review of the DEIS, EPA has rated the environmental impacts of the preferred alternative as "EC" (Environmental Concerns) and the adequacy of the impact statement as "2" (Insufficient Information). A copy of EPA's ranking system is enclosed for your reference. The basis for this rating is contained in the attached detailed comments. A description of our rating system can be found at: <http://www.epa.gov/compliance/nepa/comments/ratings.html>.

Thank you for the opportunity to offer these comments. If you have any questions, please contact Ms. Barbara Okorn at (215)814-3330.

Sincerely,



Barbara Rudnick  
NEPA Team Leader

Attachment

